3 grams chloride per liter of culture medium, and wherein the culture medium containing the non-chloride sodium salt as the primary source of sodium results in reduced fermentor corrosion compared to the culture medium containing sodium chloride as the primary source of sodium.

53. (Once Amended) A method for reducing corrosion of a fermentor during growth of microorganisms in a saline fermentation medium, said method comprising:

## obtaining microorganisms from a saline environment;

growing the microorganisms in the fermentor comprising a culture medium in which one of the primary inorganic ions is sodium which is provided in the form of a non-chloride sodium salt, wherein the non-chloride sodium salt is selected from the group consisting of soda ash, sodium carbonate, sodium bicarbonate, sodium sulfate and mixtures thereof, and wherein the culture medium containing the non-chloride sodium salt as the primary source of sodium results in reduced fermentor corrosion compared to the culture medium containing sodium chloride as the primary source of sodium.

- 59. (Once Amended) The method of Claim [58]53, wherein the microorganisms are selected from the group consisting of microorganisms which are capable of growth at a salinity level which results in a conductivity of from about 5 mmho/cm to about 40 mmho/cm.
- 60. (Once Amended) The method of Claim [58]53, wherein the microorganisms are selected from the group consisting of microorganisms which are capable of growth in 60% seawater or 60% artificial seawater.
- 63. (Once Amended) A method for reducing corrosion of a fermentor during growth of microorganisms in a saline fermentation medium, said method comprising:

obtaining microorganisms from a saline environment;

growing the microorganisms in the fermentor comprising a culture medium in which one of the primary inorganic ions is sodium which is provided in the form of a non-chloride sodium salt comprising sodium sulfate, wherein the culture medium contains a chloride concentration of less than about 3 grams chloride per liter of culture medium, and wherein the culture medium containing the non-chloride sodium salt as the primary source of sodium results in reduced fermentor corrosion compared to the culture medium containing sodium chloride as the primary source of sodium.